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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,673	10/16/2001	Jason Lango	020564-000120US	6628

EXAMINER
VERBRUGGE, KEVIN

ART UNIT	PAPER NUMBER
2188	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,673	LANGO ET AL.	
	Examiner	Art Unit	
	Kevin Verbrugge	2188	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 10/16/01.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

On page 1, line 7, the serial number of the related case is missing.

On page 1, lines 8 and 9, the attorney docket number and client reference number should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the processor" in lines 9, 11, 13, and 15. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,742,082. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences are immaterial.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,505,169 to Bhagavath et al.

Regarding claims 28-31, in Fig. 1, Bhagavath shows a streaming media cache server 121 which stores at least a portion of a stream of media in a plurality of data objects as claimed. He teaches that his streams of media include packets in the background section of his disclosure and in the fourth full paragraph of the detailed

description. These packets are stored in the streaming media cache server in data objects, as claimed.

He doesn't explicitly teach as much, but it would have been obvious to one of ordinary skill in the art at the time the invention was made to associate all the packets (data objects) of a single stream with a filename so they can be distinguished from the other packets (data objects) of other streams stored in the streaming media cache server. Furthermore, although Bhagavath does not explicitly mention flushing streams out of his cache, his streaming media cache server certainly flushes data when the cache is full, to make room for new, more desired data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to flush individual packets (data objects) from the cache so that the minimum amount of data could be flushed from the cache, increasing the likelihood that future requests to the cache could be satisfied from the cache. The alternative is flushing entire streams from the cache all at once, and it would have been obvious to one of ordinary skill in the art at the time the invention was made that this would unnecessarily delete some data when the incoming stream to be cached was smaller than the stream being flushed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to flush in units of the minimum size of a stream portion, namely a packet (data object).

Regarding claims 32 and 33, Bhagavath does not explicitly mention flushing from his streaming media cache server 121, however it is clear that this server must flush data occasionally to make room for new data. In that regard, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to implement one of the extremely well-known cache replacement policies to determine which data to evict. The known policies at the time of the invention included least frequently used, priority level, and least recently used, as claimed.

Regarding claim 34, Bhagavath's data is served to customer computers 107.

Regarding claim 35, once data is flushed from a cache, it must be restored to the cache if it is requested by the user.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28-35 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication US 2002/0029282 A1 to Buddhikot et al.

Regarding claims 28-31, Buddhikot discloses at paragraph 79 the claimed method for a cache memory. Specifically, he teaches storing at least a portion of a

stream of media data in a plurality of data objects (segments) and these are associated with a filename (to indicate the particular clip or movie to which that segment belongs).

In paragraph 79, Buddhikot teaches the claimed step of determining that a first data object (segment) can be flushed from the cache memory and then flushing it while maintaining a second data object in the cache memory. Clearly it is advantageous to flush only a portion of all data objects since the remaining objects can then be supplied to the client as needed. If all objects (segments) from a particular clip are flushed to make room for new data in the cache, then the next time any data from that clip are requested, they will have to be reloaded into the cache.

Regarding claim 32, Buddhikot teaches indicia including the GCHR (global clip hotness rating) and the proximity to the end of the clip such that segments with the lowest GCHR and the closest proximity to the end of the clip are removed first.

Regarding claim 33, Buddhikot's GCHR is determined using the claimed factors.

Regarding claim 34, Buddhikot's device serves the remaining objects to the client.

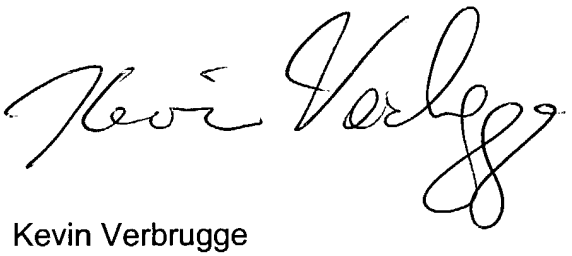
Regarding claim 35, clearly, once a segment/object is removed from the cache, if it is requested later by the user, it must be reloaded to the cache.

Conclusion

Any inquiry concerning a communication from the Examiner should be directed to the Examiner by phone at (703) 308-6663 before 10/14/04 and at (571) 272-4214 after 10/14/04.

Any response to this action should be labeled appropriately (serial number, Art Unit 2188, and After-Final, Official, or Draft) and mailed to Commissioner for Patents, Washington, D.C. 20231 or faxed to (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.



Kevin Verbrugge
Primary Examiner
Art Unit 2188